A Randomized Clinical Trial of a Money Management Intervention for Veterans With Psychiatric Disabilities

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Objective: The study evaluated an intervention to help veterans with psychiatric disabilities, who face a unique set of challenges concerning money management.

Methods: A randomized clinical trial was conducted of a brief (one to three hours) psychoeducational, recovery-oriented money management intervention called $teps for Achieving Financial Empowerment ($AFE).

Results: Analyses revealed no main effects on outcomes of random assignment to $AFE (N=67) or a control condition consisting of usual care (N=77). Veterans who reported using $AFE skills showed significantly lower impulsive buying, more responsible spending, higher rates of engaging in vocational activities, and greater number of work hours compared with veterans in the control condition.

Conclusions: Findings have clinical implications for case management services involving informal money management assistance. Offering veterans with psychiatric disabilities a one-time money management intervention is unlikely to lead to substantial changes. Results imply that efforts to improve psychosocial outcomes among veterans must not only teach but also increase use of money management skills.

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Veterans with psychiatric disabilities who receive some form of disability income face a number of challenges concerning money management. They encounter the same money management problems experienced by civilians with psychiatric disabilities (1,2) but they also experience unique challenges. Veterans can garner disability benefits from the U.S. Department of Veterans Affairs (VA) and the Social Security Administration (SSA), requiring them to navigate two complex federal agencies with differing policies and causing greater potential for confusion, severe debt, and financial exploitation by others.

Veterans with psychiatric disabilities have shown poor outcomes related to debt, unemployment, homelessness, and money mismanagement (3–5). Little research has examined how to help veterans with psychiatric disabilities learn tangible skills needed to maintain financial stability. A randomized trial of a money management intervention in which a money manager stored participants' checkbooks and automated bank cards showed reduced substance abuse among veterans with co-occurring disorders (6). Also, assigning representative payees to manage disability benefits for veterans with mental illness was associated with reduced substance abuse and improved quality of life (2). To our knowledge, there has been no evaluation of an intervention that uses a psychosocial rehabilitation approach to develop money management skills consistent with a self-directed care model among veterans who receive benefits for psychiatric disabilities.

METHODS

The efficacy of a psychoeducation intervention called $teps for Achieving Financial Empowerment ($AFE) was examined in a clinical trial of veterans with psychiatric disabilities conducted between April 2011 and September 2014. Veterans were randomly assigned to the $AFE intervention or to a usual care control group. $AFE was hypothesized to foster financial skills, increase employment, boost work motivation, and reduce disablement.

Following institutional review board approval, participants were recruited from the Durham VA Medical Center through flyers and clinician referrals. Inclusion criteria were having served in the U.S. military; diagnosis of schizophrenia, schizoaffective disorder, bipolar disorder, depressive disorder, or posttraumatic stress disorder; having received VA or SSA disability benefits for a psychiatric disability; and age between 18 and 65.

Participants completed informed consent that included permitting verification of psychiatric diagnosis in VA medical records. Interviewers conducted a 60- to 90-minute baseline interview. Each participant received $30 upon completion of the interview. Afterward, veterans were randomly

assigned to study condition. Participants in the $AFE condition were contacted by a trained facilitator to schedule the one-on-one intervention.

Designed primarily for case managers working with veterans with psychiatric disabilities, $AFE adapts skills training materials from various sources, including the VA, SSA, the U.S. Department of Labor, and Boston University Psychiatric Rehabilitation Practitioner Tools (7). A brief psychoeducational intervention (8), $AFE involves outlining specific strategies to help military veterans to save money, for example, by providing information about veteran discounts for goods and services. Facilitators teach veterans how to create a viable budget by first distinguishing between expense needs and expense wants and then listing their own income and expenses, including saving 10% of their income for emergencies and another 10% for reaching a goal or purchasing a desired item. Facilitators calculate how much veterans could earn without losing disability SSA benefits and review various VA vocational rehabilitation programs available to veterans. Strategies for avoiding various forms of financial exploitation are reviewed, and local and national mental health, vocational, and veterans' resources are provided.

For all participants, a six-month follow-up interview was conducted to ascertain changes in outcomes. Interviewers were blind to study condition. Each participant received $30 for completing the follow-up interview.

Data on demographic information included age, gender, race-ethnicity, education, and marital status. *DSM-IV* psychiatric diagnosis was gathered by self-report and from veterans' medical records at the VA. The Brief Psychiatric Rating Scale (BPRS) (9) measured psychiatric symptoms. The Empowerment Scale measured self-efficacy (10). The Montreal Cognitive Assessment assessed cognitive abilities (11).

Financial variables included savings and debt in the past six months, annual income, and homelessness. We tested veterans' basic money knowledge regarding disability benefits, savings, and borrowing with ten true-or-false items, with possible scores ranging from 0 to 10. [A list of the money knowledge items is available as an online supplement to this report.]

Participants were asked about whether they were currently employed, the number of hours they spent working per week, and whether they were engaged in seeking work.

The Client-Rated Assessment of Money Management (12) measured impulsive spending, with items rated on a Likert scale ranging from 0, never, to 4, always, including items such as "I have spent more money than I planned on lottery tickets or other gambling activities," and "When I wanted to buy something, I bought it without worrying about the cost." These items produced a Cronbach's alpha of .79, showing good internal consistency. This assessment also measured responsible spending with items such as "I have money saved up in case I need it," and "I have saved my money, bit by bit, for things I wanted." These items produced a Cronbach's alpha of .73, also showing good internal consistency.

After the follow-up interview, facilitators opened a sealed envelope indicating study assignment and asked veterans in the intervention group about whether they used specific skills learned in $AFE. The questions about skills were asked specifically in the context of the $AFE intervention. In contrast, questions about financial outcome measures did not refer to $AFE. Participants in the comparison group were not asked about the use of skills learned in $AFE because they did not receive the $AFE intervention.

SAS, version 9.4, was used to conduct statistical analyses.

RESULTS

In total, 184 participants consented to participate; 87 veterans were randomly assigned to the experimental condition and 97 were assigned to usual care. Of those, 144 (78%) veterans provided baseline and six-month follow-up data. [A table presenting the distribution of the sample by demographic, clinical, and financial variables is available in the online supplement.]

At six-month follow-up, 67 of the 87 (77%) veterans assigned to the $AFE intervention study condition and 77 of the 97 (79%) veterans assigned to the usual care control condition were retained; thus attrition was equivalent for both conditions. Regression analyses with $p<.05$ stepwise deletion showed that retention was not significantly related to treatment assignment but was significantly predicted by older age and higher income (accounting for 11% of the variance).

Duration of the $AFE session ranged from one to three hours (median=1.5 hours). To establish and monitor intervention integrity, facilitators (bachelor's-level clinicians) were evaluated in person during three consecutive administrations of $AFE according to 15 intervention fidelity criteria. Intervention implementation with high fidelity (>87% of criteria) was achieved after three sessions.

Of those in the $AFE condition, 49 (73%) completed the $AFE intervention and 18 (27%) did not. Over 80% of veterans who completed $AFE reported using one or more money management skills in the six months following the intervention [see Table 2 in the online supplement].

An analysis of variance was used to test whether participation to the $AFE intervention was associated with significant increases in money-saving behavior, employment, and perceived empowerment as well as significant decreases in debt, psychiatric symptoms, and homelessness. There were no significant main effects of the intervention on outcomes in the randomized clinical trial.

The lack of findings may stem from the fact that some participants who were assigned to the intervention condition did not complete the study and others who finished the $AFE intervention did not report using the skills from the intervention. For this reason, secondary post hoc analyses examined whether reported use of $AFE skills among veterans in the intervention condition was associated with improved outcomes compared with veterans in the control condition.

Table 1 shows that veterans who reported using the $AFE budget had significantly higher scores for responsible

TABLE 1. Outcomes associated with use of skills from the $AFE intervention at six-month follow-up among 144 veterans with psychiatric disabilities[a]

Outcome and skill	β	SE	t[b]	p
Responsible spending[c]				
Baseline scores	.44	.098	5.75	<.001
$AFE participants who used $AFE budget (reference: usual care group)	.41	.191	2.13	.035
$AFE participants who did not use $AFE budget (reference: usual care group)	−.12	.166	.54	.463
Impulsive spending[d]				
Baseline scores	.34	.067	5.06	<.001
Number of $AFE skills used by $AFE participants (reference: usual care group)	−.05	.019	−2.48	.014
No use of $AFE skills by $AFE participants (reference: usual care group)	−.08	.139	−.60	.548
Any vocational activity[e]				
Baseline data	.63	.058	10.84	<.001
$AFE participants who looked for work because of $AFE (reference: usual care group)	.22	.097	2.25	.026
$AFE participants who did not look for work because of $AFE (reference: usual care group)	−.03	.062	−.49	.627
Number of work hours[f]				
Baseline data	.82	.134	10.05	<.001
$AFE participants who looked for work because of $AFE (reference: usual care group)	6.59	3.379	1.95	.053
$AFE participants who did not look for work because of $AFE (reference: usual care group)	1.77	2.148	.82	.411
Money knowledge[g]				
Baseline data	.31	.067	4.62	<.001
$AFE participants who used $AFE skills (reference: usual care group)	.65	.311	2.08	.039
$AFE participants who used no $AFE skills (reference: usual care group)	−.10	.352	−.27	.786

[a] $AFE, $teps for Achieving Financial Empowerment
[b] df=143
[c] F=13.23, df=3 and 140, p<.001, model R^2=.22
[d] F=11.08, df=3 and 140, p<.001, model R^2=.19
[e] F=42.56, df=3 and 140, p<.001, model R^2=.48
[f] F=36.34, df=3 and 140, p<.001, model R^2=.44
[g] F=7.91, df=3 and 140, p<.001, model R^2=.15

spending behaviors at six-month follow-up compared with control participants (p=.035), and veterans who used more $AFE skills were significantly less likely than participants in the control condition to engage in impulsive spending at six months (p=.014). Further, veterans who specifically endorsed using $AFE information to look for work were significantly more likely than control participants to be engaged in any vocational activity at six months (p=.026) and to have an increased number of work hours (p=.053).

Additional analyses indicated that annual income was related to the number of $AFE skills used (β=.57, p=.02) and to the odds of using versus not using a $AFE budget (odds ratio [OR]=1.64, 95% confidence interval [CI]=1.16–2.32, p=.005). After the t tests comparing outcomes with reports of using $AFE skills were adjusted for annual income, the positive association between the number of $AFE skills used and lower impulsivity remained significant (t=−2.56, df=143, p=.011), as did the positive association between use of the $AFE budget and higher scores for responsible spending behaviors (t=2.02, df=143, p=.045). Last, we found that BPRS scores predicted whether veterans in the intervention group used or did not use $AFE work-related information (OR=1.09, CI=1.01–1.18, p=.018).

Veterans who reported use of $AFE skills had significantly greater improvement in money knowledge from baseline to follow-up compared with participants in the control group (p=.039) [see Table 3 in the online supplement for a list of money knowledge items]. Specifically, mean±SD scores on the 10-point money knowledge scale among $AFE participants who reported use of $AFE skills increased by more than double (4.8±2.2 to 6.7±2.1) compared with the increase among participants in the control group (5.6±1.8 to 6.3±1.5) and among participants in the $AFE condition who did not complete the intervention or report using any skills (5.5± 2.0 to 6.1±1.5).

DISCUSSION

To our knowledge, this study is the first to test the effectiveness of a recovery-oriented money management intervention that is consistent with a self-directed care model for mental health services (7,13) for veterans who receive benefits for psychiatric disabilities. In intent-to-treat analyses, veterans with psychiatric disabilities who were randomly assigned to the intervention did not show superior outcomes at six months compared with the usual care control group.

As a result, primary analyses of the randomized controlled trial demonstrated that there were no main effects of the intervention. Post hoc analysis yielded a few secondary findings of note. More than 80% of study participants who completed $AFE reported using skills from the intervention, with the majority using multiple $AFE skills. Veterans who reported applying $AFE skills, the analysis revealed, showed fewer impulsive spending behaviors compared with control participants at the six-month follow-up. Veterans who employed the intervention budget had significantly higher scores for responsible spending behaviors at the six month follow-up compared with control participants. Furthermore, veterans who said they looked for employment because of

the $AFE intervention were significantly more likely than control participants to be engaged in vocational activities and to have an increased number of hours worked.

Findings have clinical implications for case management services for clients with psychiatric disabilities (7), which typically involve less formal money management assistance than the $AFE intervention. Although results are mixed, research indicates that brief psychoeducational interventions appear to be modestly associated with reduced relapse (8). Recent literature on financial literacy indicates that one-time educational interventions that use a single modality or session to teach materials have limited effectiveness in bringing about significant change, but they may be more effective if they target particular population subgroups (14,15). As such, $AFE may not have worked because it involves a one-time money management intervention that provides broad money management education as opposed to skills training for particular financial needs.

Thus the data suggest that efforts are needed to increase actual use of money skills, tailored to the veteran's individualized money management needs. Previous interventions to improve financial outcomes for veterans with psychiatric disabilities (2,6) included components that facilitated continued interactions, such as money managers or payees, to better ensure effective money management. Current findings imply that future approaches to implementation of $AFE would be improved by increasing the number of sessions and enhancing motivation to use $AFE skills to address a veteran's individualized financial needs.

The study had several limitations. Although research assistants who collected data were blind to study condition, the clinical trial was not double blind. Still, control participants showed a general trend in improvement in money management, suggesting a possible effect associated with being observed. Post hoc analyses have limitations in external validity because they are no longer based only on randomization to the two conditions.

Participants were also self-selected and may not be representative of all veterans with psychiatric disabilities. Future clinical trials would benefit from assessing and comparing financial and educational outcomes of participants in each study condition, given that these analyses may be necessary to impute causation of outcomes. Validation of financial data may have provided more objective measures of money management. We did not examine financial exploitation, but it warrants attention in future research.

CONCLUSIONS

The clinical trial speaks to both the limitations and the potential of money management programs for veterans with psychiatric disabilities. The data indicate that for the $AFE intervention to be more effective in the future, it must both teach veterans necessary skills and facilitate ongoing and increased use of these critical life skills to provide benefit across various domains of psychosocial functioning.

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